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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,097	08/08/2003	Yu Zheng	PAT-1130CC2	5018
7590		07/24/2006	EXAMINER	
Raymond Sun		WILKENS, JANET MARIE		
12420 Woodhall Way		ART UNIT		
Tustin, CA 92782		PAPER NUMBER		
		3637		

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/637,097	ZHENG, YU	
	Examiner	Art Unit	
	Janet M. Wilkens	3637	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18,20-23 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18,20-23 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 9, 2006 has been entered.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18, 20-23 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,604,537. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable panels attached at adjacent edges thereof via stitching and sleeves. Since the frames of the folding panels are themselves foldable it would be obvious to twist and/or

fold them in a manner wherein concentric rings are formed. It also would be obvious to add the fabric material onto the frame so that it and the frame form a flat structure, for aesthetic reasons, etc and obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

Claims 18, 20-22 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 10, 11, 13, 15, 17-19, 21, 23 and 24 of U.S. Patent No. 6,209,557. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable panels attached at adjacent edges thereof via sleeves. Since the frames of the folding panels are themselves foldable it would be obvious to twist and/or fold them in a manner wherein concentric rings are formed. It also would be obvious to add the fabric material onto the frame so that it and the frame form a flat structure, for aesthetic reasons, etc and obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

Claims 18, 20-23 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 8 and 12 of U.S. Patent No. 5,778,915. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable panels attached at adjacent edges thereof via stitching and sleeves. Since the frames of the folding panels are themselves foldable it would be

obvious to twist and/or fold them in a manner wherein concentric rings are formed. It also would be obvious to add the fabric material onto the frame so that it and the frame form a flat structure, for aesthetic reasons, etc and obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

Claims 18, 20-22 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 9-12 of U.S. Patent No. 5,579,799. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable panels attached at adjacent edges thereof via sleeves. Since the frames of the folding panels are themselves foldable it would be obvious to twist and/or fold them in a manner wherein concentric rings are formed. It also would be obvious to add the fabric material onto the frame so that it and the frame form a flat structure, for aesthetic reasons, etc and obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

Claims 18, 20-23 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 and 5 of U.S. Patent No. 5,560,385. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable panels attached at adjacent edges thereof via stitching and sleeves. Since the frames of the folding panels are themselves foldable it would be obvious to

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twist and/or fold them in a manner wherein concentric rings are formed. It also would be obvious to add the fabric material onto the frame so that it and the frame form a flat structure, for aesthetic reasons, etc and obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

Claims 18, 20-23 and 28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 6,851,439 in view of Wan. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant invention and patent teach a pair of foldable flat panels hingedly attached at adjacent edges thereof. The folding panels are themselves foldable in a manner wherein concentric rings are formed. Although it is not stated how the panels are attached, it would have been obvious to employ sleeves, such as is shown by Wan in Fig. 4, to provide a specific aesthetically pleasing hinge attachment between the panels. It further would have been obvious to position the adjacent panels in various configurations, including at actuate angles with respect to one another, depending on the structural shape desired.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 20-23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springer et al in view of Wan. Springer teaches a collapsible structure (Fig. 2) comprising: a flat side member (32) and a flat base member (34) hingedly attached via connectors (36). The members are foldable and include fabric there over. For claim 18, Springer fails to teach that the hinge between the members is comprised of two sleeves and stitching and that each frame includes a separate fabric material there over. Wan teaches the use of sleeves and stitching (see Fig. 4) to hingedly attach collapsible framed members together; the frames each including separate fabric material (30) thereover. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Springer by using alternate hinge means between its frame members, i.e. using the sleeve/stitching members of Wan therein instead of the connectors presently used, since these hinge means are functionally equivalent and would work equally well between the members of Springer. Furthermore, if the material and sleeves of Wan are used with the foldable frames of Springer, the structure assembly as a whole would be simplified, using fewer separate parts to form the structure and the hinge would be more supportive, extending the entire length of the frames. Furthermore, because of the positioning of the members, the flexible hinge angle of Springer in view of Wan would be an acute angle.

### ***Response to Arguments***

In response to the arguments concerning the double patenting rejections:

First, the examiner contends that the double patenting rejections do point out both the similarities and differences between the patents and disclosed application and do include obvious statements with the appropriate motivation statements.

Second, as discussed before, the term “base” is merely nomenclature. Note: the description of the members of a structure depends on the positioning of the structure as a whole. For example, by setting one of the disclosed panels of the cited references on a floor surface, it inherently becomes a base member. Since all of the structural limitations are met in the claims of the patents, all of the “positioning” terms would inherently be met as well by positioning the structure/panels as needed. As for the “flat” limitation, as stated above, it also would be obvious to add the fabric material onto the frames of the disclosed panels so that it and the frames form flat structures, for aesthetic reasons, etc. Furthermore, when placing the material taut over the frames, the frame/material panels would inherently be flat.

Third, that some of the cited reference claims contain additional limitations is irrelevant. The claims of the instant application are in “comprising” format and therefore are “open” ended; therefore, no “conversion” of the patents’ structural features are needed. The double patenting rejection is over the instant application’s claims and the claims of the cited references contain the features disclosed therein and therefore are obvious variants of each other.

Finally, the hinged manner in which the patents’ panels are attached would inherently allow them to be located at acute angles.



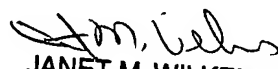
Addressing the art rejection is made under 103 using Springer et al in view of Wan: the examiner contends that with the combination of these references, the newly added "separate fabric material" of the frame members limitation would be met. The material pieces of Wan would be attached to a respective frame member of Springer and each piece includes a sleeve which when attached together form a hinge.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet M. Wilkens whose telephone number is (571) 272-6869. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wilkens  
July 18, 2006

  
JANET M. WILKENS  
PRIMARY EXAMINER  
10-637,097